## WORLD JOURNAL OF PHARMACEUTICAL RESEARCH

SJIF Impact Factor 8.084

Volume 11, Issue 14, 575-582.

Case Study

ISSN 2277-7105

# A CASE STUDY ON THE EFFICACY OF TILA KALKA UPANAHA AND YOGA BASTI IN THE MANAGEMENT OF VATARAKTA (GOUTY **ARTHRITIS**)

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Article Received on 23 August 2022,

Revised on 13 Sept. 2022, Accepted on 03 October 2022

DOI: 10.20959/wjpr202214-25758

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#### **ABSTRACT**

Modern lifestyles are a nidus for many metabolic diseases which hamper day-to-day activities and one such is Gouty Arthritis. It is a purine metabolic disorder characterized by hyperuricemia and deposition of monosodium urate crystals in joints with intense pain, swelling, and redness around joints. It can be associated with Vatarakta in Ayurveda due to the involvement of joints and intensity of pain. Vatarakta is "Vatapradhana Tridoshaja Vatavyadhi" and Rakta is main Dushya. Amongst Tridosha, Vata is predominant in Vatarakta. Ayurvedic management shows promising results in the management of Vatarakta. This case presents a male patient of 62 years of age, with the complaint of pain in the bilateral ankle joint,

tenderness and swelling, pain in the greater toe of the right leg, stiffness in the toes, constipation with hyperuricemia. He was given a single sitting of Yoga Basti with 3 Niruha Basti of Yashtyahwadi Niruha Basti and 5 Anuvasana Basti of Shatavari ghrita along with Tila Kalka Upnaha. Gradually pain, swelling, tenderness in the joints, and serum uric acid level decrease. Basti is one of the greatest treatment modalities for diseases caused by vitiated Vata especially indicated in Vatarakta and Upanah helps in relieving pain and stiffness.

**KEYWORDS:** *Vatarakta*, Gouty Arthritis, *Yogabasti*, *Upanaha*.

#### INTRODUCTION

Metabolic disorders have become a part of the contemporary lifestyle due to the junk food culture, lack of physical activities, stress and hectic traveling, etc. Vatarakta is one of the metabolic disorders which decreases the quality of life of a patient as there is marked inflammation which leads to pain in joints, and restricted mobility and thus makes the patient a health economic burden. Vatarakta is a Vatapradhana Tridoshaja Vatavyadhi in which vitiated Vata and Rakta spread throughout the body due to their subtle pervasive nature (Sukshma Guna), mobility (Sara guna of Vata) and fluidity (Drava Guna of Rakta), when they reaches joints because of tortuous shape of joints, morbid dosha lodges their. Hence *Vata* is obstructed by vitiated *Rakta* in joints. [1] Its symptoms are according to the dominance of dosha.

#### Types of Vatarakta

Vata pradhana Vatarakta: In this there is dominancy of symptoms like twitching, pricking pain, the skin overlying swelling is dry and black, stiffness of body parts, exacerbation of symptoms by cold, numbness, etc.

**Rakta pradhana Vatarakta:** In this, there is a dominancy of symptoms like swelling, severe pain and pricking pain, the copper color of the skin, itching, and moistness.

*Pitta pradhana Vatarakta*: In this, there is dominancy of the symptoms like severe burning sensation, sweating, fainting, thirst, tenderness, pain, swelling, and suppuration.

Kapha pradhana Vatarakta: In this, there is dominancy of symptoms like numbness, heaviness, moistness, unctuousness, and coldness will prevail.

#### Vatarakta is also of 2 types based on severity and dhatus involved

Uttana Vatarakta: The disease pathology afflicts the superficial tissues i.e. Skin and muscles, the symptoms are also limited to the skin. The symptoms moreover look like skin disease or *Kushta* with skin lesions and muscle pain.

Gambhira Vatarakta: The disease pathology involves blood and other deeper tissues like bone and joints and also the internal viscera.

The pain in Vatarakta is defined as "Akhuvisha Evam Pida" as it gradually spreads and manifests its symptoms. [2] Due to the resemblance between symptoms, it is can be correlated

with Gout. Gout is the exact crystal precipitation disease characterized by intense pain & inflammation of the first metatarsophalangeal joint initially, later other joints like the ankle, knee, wrist, elbow, fingers, etc are also involved due to unusual elevation of Urate level in the body. It can also be defined as the pathological response of the joint or periarticular tissues to the existence of monosodium urate crystals moulded secondarily to hyperuricemia, clinically this could present as inflammatory arthropathy, bursitis, tenosynovitis, cellulitis, or as a nodular tophaceous crystal deposit. Constant Hyperuricemia may progress to clinical displays of episodes of gout. Hyperuricemia is the chief cause of the development of Gout. Mean serum urate levels in men are more than 7 mg/dl and in women 6.0mg/dl is said to be Hyperuricemia. The prevalence and incidence of Gout differ extensively according to the population and methods used for the study. Prevalence rate varies from < 1% to 6.8% and incidence of 0.58-2.89 per1000 persons-years. Men with older age are more likely to suffer from Gout than women. There is a higher prevalence of hyperuricemia in Asian countries like India (approx. 25.8%).

#### **CASE REPORT**

**Patient information-** A 62 years old male patient was admitted to IPD of *Panchakarma*, with the chief complaint of pain in the legs and anxiety, and one night he had severe pain in the bilateral ankle joint, tenderness and swelling, pain in the greater toe of right leg, and stiffness in the toes and soles along with incomplete evacuation of bowel.

#### **Clinical findings**

The general condition of the patient was not good he was anxious due to pain and had a white-coated tongue. Body temperature – 98 F, pulse rate- 80/min, blood pressure – 110/78 mm Hg, Height – 170 cm, Weight - 72 kg. The patient was of *Vata-pitta Prakriti* with *Madhyama samhanana* (lowermost body constitution), *Avara satva* (weak mental strength), *Avara vyayam shakti* (weak physical strength), *Madhyam ahara shakti* (moderate food intake) and *Avara Jaran shakti* (weak digestive power). The patient had antalgic gait. He was in pain, so he used a wheelchair otherwise patient was conscious and well oriented about the place, time, and person. Normal memory, cognitive functions, and speech, cranial nerves examination was normal too. The respiratory and cardiovascular systems were normal. Locomotory examination revealed normal bulk, tone, power, and good coordination of bilateral hands and feet. The patient had a normal sense of joint position.

#### **Diagnosis**

The diagnosis was made based on clinical symptoms such as rapid onset, extremely painful first metatarsophalangeal joint and ankle joint, and hyperuricemia. *Vatajpradahana vatarakta* was considered an ayurvedic diagnosis based on symptoms like pain in the sole of feet, edema and pricking pain in ankle joints, and stiffness in the toes. Even the incomplete evacuation of the bowel signalled the vitiation of *Vata dosha*.

#### Investigation

Serum Uric Acid

Serum Urea

Serum Creatinine

#### **Treatment**

- 1. Nidana parivarjana
- 2. Yogabasti for 8 days was given with.

A. Niruha basti: (600ml)

**Yashtimadhu ksheerpaka** as *kwatha dravya*+ (*madanphala*+ *pippali*) powder for *kalka* + go ghrita + madhu+ lavana<sup>[7]</sup>

B. Anuvasana Basti: Shatavari ghrita (120 ml)

- **3.** Bhrista Tila Upnaha Each day 125 gm of black sesame seeds were taken then they were dry roasted in a pan, after roasting them well, they were dipped in 150 ml of cow's milk. Then a paste was made out of that mixture and then it was cooked again on heat till it has proper consistency for purpose of application. The heated paste is evenly spread onto the leaves of Eranda and then it was kept on the sole, ankle joint, and toes of the feet. Then it was bandaged with a cotton bandage. To prevent daha patient was advised to remove upanaha (tied at day) at night.
- 4. Shaman aushadi like Kaishore Guggulu 2BD after the meal, Brihat manjisthadi kwatha 40 ml BD.

### **RESULTS**

The patient was assessed based on OMERACT endorsed measure of outcome for studies of acute gout domain. The core domains were pain, joint swelling, joint tenderness, and patient global assessment. Even after the first day of *Upanaha* patient reported a mild reduction in

the pain in the bilateral foot soles, ankle joint, and right great toe. Due to pain patient used a wheelchair for daily activities but after 4 days of *upanaha* patient was able to walk with the help of a walker. Gradually joint tenderness and swelling was also decreased along with stiffness in the toes. The bowel moments of the patient were satisfactory and regular too. The outcomes were assessed before and after the treatment. No concurrent allopathic medicine was given. There was significant improvement in the symptoms which improved quality of life. Serum Uric acid was also investigated after a week.

Score domains	<b>Endorsed Instrument</b>	Before treatment	After treatment
Pain in joint	10-cm VAS	10	5
Joint tenderness	4-point Likert scale	4	1
Swelling	4-point Likert scale	4	1
Patient global assessment	5- point Likert scale	5	2

Lab investigation	Before treatment 3/11/21	After treatment 17/11/21
Serum uric acid	9.4mg/dl	7.6 mg/dl

#### **DISCUSSION**

Sukhoshana Upnaha is indicated in the line of treatment of Vata Pradhana Vatarakta. [8] Acharya Chakrapani suggested that black tila (sesame seeds) must be fried and then dipped in cow's milk and then paste of that must be applied. [9] According to Charaka, Yashtyahwadi Niruha Basti is indicated in Vatarakta. [10] Phenolic compounds present in licorice have an inhibitory effect on xanthine oxidase which induces gout through the formation of Uric acid, and also causes oxidative damage to tissues. [11] According to Bhavaprakash, Mulethi is one the best medicine for *Vataj*, *Pittaja*, and *Raktaj* disorders.<sup>[12]</sup> The essentials oils present in Pipper longum show mild antihyperurecimic properties.<sup>[13]</sup> Pippali has an Agni deepana effect so can be given in agnimandya and due to its tikshna guna, it does Srotoshodana. [14] Madanaphala owns lekhana guna that cause the anuloman of vata, pitta shamana and rakta shodhaka, vedanashtapaka and shothahara. [15][16][17] Shatavari ghrita used for anuvasana is indicated in Vatarakta. [18] Shatavari acts on disorders caused by vitiated Vata, Rakta, and Pitta and swelling caused by them too. [19] Upanaha is a type of sweda, here we used sagni upanaha its properties are that it reduces pain and stiffness in joints. [20] Tila is the best drug as it pacifies vitiated Vata through its Snigdha and ushna properties and when it is cooked with milk it may pacify the vitiated Rakta as it is mixed with different dravya it possesses a unique property of curing all diseases.<sup>[21]</sup> Sesame act as a pain reliever due to unsaturated

fatty acids (palmitic, stearic, oleic, and linoleic acids), lignans (sesamin, asarinin, sesamolin, and sesamol), and gamma-tocopherol. So, the topical application of sesame has antinociceptive properties.<sup>[22]</sup>

*Kaishore Guggulu* is the choice of drug in *Vatarakta*.<sup>[23]</sup> It is anti-allergic, anti-bacterial and blood Purifying in nature.<sup>[24]</sup> The analgesic and anti-inflammatory activity works on joints (in Gout), muscles (in Fibromyalgia), back pain, and connective tissue disorders (like sports injuries).<sup>[25]</sup> Because of the presence of the maximum number of *tikta dravya* in the *Brihat Manjishthadi Kwath* it acts as *Srotoshodhaka*. In *Vatarakta* chief *dushya* is *Rakta*.<sup>[26]</sup> *Rakta Prasadana, Kandughna*, and *Daha prashamana* properties of this *kwatha* prove its necessity for *Vatarakta*.

#### **CONCLUSION**

The above case suggests that Ayurvedic management shows promising results in quick management of inflammatory and metabolic diseases like Gout. Panchakarma plays a significant role in the management as it not only pacifies the doshas but does the bio-purification of metabolites from the body too. Basti itself is the line of treatment of *Vatarakta*, is known for its *srotoshodhana* properties, and the *Upanaha* indicated joint diseases like pain, swelling, and stiffness. *Vata* and *Rakta* both contrast properties thus a single drug can't be used in this disease. The observed relief in symptoms may be attributed to the *anulomaka*, *srotoshodhaka*, *agnideepaka*, and blood purifier properties of the drugs which clear the path of *Vata* obstructed by *Rakta*. The phenolic compounds, essential oils, etc. present in the drugs have anti-inflammatory properties which break the pathogenesis of gout.

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